

REMARKS

New claims 22-25 have been added. Support for these claims may be found throughout the application and at least on page 17, lines 22-23. No new matter was added. Claims 7-25 are now pending in the present application.

Claims 7-12 and 16-19 were rejected under 35 U.S.C. §102(e) as being anticipated by Roe (U.S. Patent Number 5,607,760). Applicants respectfully traverse this rejection.

The present invention is directed to an absorbent article wherein at least the sealing edge or sealing edges are treated with a non-adhesive sealing medium which, in use, at least partly fills out any through-penetrating pores which are formed between the sealing edge or edges and an abutment part of a wearer's skin, and/or which, when the article is donned, smears the abutment part of a wearer's skin and thereby increases a liquid-skin wetting angle. This invention provides an absorbent article with improved sealing against the wearer's skin.

Roe discloses a disposable absorbent article having a lotion coating on the outer surface of the topsheet that is semisolid or solid at ambient temperatures (i.e., at 20°C.) and is adapted to be transferred to the wearer's skin, where it acts to reduce the adherence of BM to the skin of the wearer, thereby improving the ease of BM clean up and enhancing skin softness. *Column 3, lines 1-9.* The lotion compositions of the present invention comprise: (1) an emollient to improve the lubricity of the solid polyol polyester(s); (2) a solid polyol polyester(s) immobilizing agent; (3) optionally a hydrophilic surfactant(s); and (4) other optional components. *Column 10, lines 34-38.*

Roe is primarily directed to a diaper with a liquid pervious topsheet coated with a lotion composition. *See abstract.* In describing the topsheet, Roe states:

Similarly, it is important that the lotion composition also be sufficiently wettable to ensure that liquids will transfer through the topsheet more rapidly. This diminishes the likelihood that body exudates will flow off the lotion coating rather than being drawn through the topsheet and being absorbed by the absorbent core. Depending upon the particular immobilizing agent used in the lotion composition of the present invention, an additional hydrophilic surfactant (or a mixture of hydrophilic surfactants) may, or may not, be required to improve wettability.... Similarly, a hydrophobic emollient such as petrolatum will require the addition of a hydrophilic surfactant.

Column 21, lines 42-61. Thus, Roe requires that the lotion composition be hydrophilic in order to ensure that the topsheet or other portion of the absorbent article treated remains hydrophilic. There is no distinction between these teachings and the section of Roe which notes that the lotion may be applied to any part of the diaper wherein it can come in contact with the wearer's skin.

The Office Action states:

Roe states that the hydrophilic surfactant used with the lotion compositions of the present invention is optional (col. 10, lines 34-39). Roe also states that it is highly desirable that the diaper topsheet is made of a hydrophilic material to promote rapid transfer of liquids through the topsheet (col. 21, lines 40-42) and that petrolatum requires the addition of a hydrophilic surfactant when used to treat the diaper topsheet.

Page 6, line 20 - page 7, line 2.

Nothing in Roe indicates that the above cited description of the various lotion materials and the need for those materials to be hydrophilic does not apply when the lotion is applied to a portion of the diaper other than the topsheet. Such a reading of Roe is unwarranted. Throughout Roe, the teachings indicate that hydrophilicity is desirable and required due to the nature of the invention, which is to promote rapid transfer of liquids through the topsheet.

Roe requires and only teaches a hydrophilic lotion which is used on a hydrophilic topsheet (or other portion of the absorbent article). Roe does not teach a sealing medium which is typically hydrophobic and which provides an increase in liquid-skin wetting angle.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. V. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The rejected claims are directed to an absorbent article wherein at least the sealing edge or sealing edges are treated with a non-adhesive sealing medium which, in use, at least partly fills out any through-penetrating pores which are formed between the sealing edge or edges and an abutment part of a wearer's skin, and/or which, when the article is donned, smears the abutment part of a wearer's skin and thereby increases a liquid-skin wetting angle. Roe does not disclose treating the free sealing edge as claimed. Rather, Roe teaches coating the upper layer of the

absorbent article. Although Roe mentions applying lotion to leg cuffs, this is not the same as the treatment of the sealing edge of the absorbent article as claimed.

In view of the lack of disclosure in Roe of each and every element of the claimed invention, Applicants respectfully request that the anticipation rejection over Roe be withdrawn.

Claims 9-12 and 13-15 were rejected under 35 U.S.C. §103(a) as being unpatentable over Roe. Applicants respectfully traverse this rejection.

As described above, Roe is directed to an absorbent article which has a topsheet coated with a lotion composition. The topsheet and the lotion composition are to be hydrophilic to promote rapid transfer of liquids through the topsheet. Although Roe mentions that the lotion composition may be applied to any part of the diaper wherein it can come in contact with the wearer's skin, no difference in the properties or desired effect is taught besides preventing the adherence of BM to the wearer's skin. A sealing effect as obtained by the claimed invention is not suggested or taught. Rather, Roe teaches a material which would have exactly the opposite effect from that obtained by the claimed invention, since Roe teaches the use of hydrophilic materials to allow the transfer of liquids, not the use of a sealing medium to prevent leaks. Thus, Roe teaches away from the invention of claims 9-12 and 13-15.

The Office Action points out the reference in Roe to Dragoo and leg cuffs. Such reference, however, does not mean that the other teachings of Roe can be ignored. Clearly, leg cuffs are intended to prevent leakage, but the teachings of Roe regarding the use of lotion do not suggest the claimed invention just because the structure of the leg cuffs may be the same as in Dragoo. Roe makes clear that, although petrolatum may be used in the lotion taught therein, if such a material is used, the addition of a hydrophilic surfactant is required to obtain a sufficiently wettable lotion composition. *Column 21, lines 40-61.* This teaching is applicable to both the topsheet and any other placement of the lotion. Nothing in Roe suggests otherwise. Thus, petrolatum is not suggested for use alone and must be used in combination with other ingredients in the lotion composition of Roe to provide the desired hydrophilic qualities. Application of the lotion to any portion of the diaper is intended for the purpose disclosed. No other purpose is disclosed or suggested and there is no suggestion to

modify Roe to use a hydrophobic material at the leg cuffs for leakage prevention.

This is supported by the Background of the Invention of Roe which specifically describes the problem to be solved by the invention of Roe as preventing the adherence of BM to the skin and discusses other solutions previously tried. *Column 1, line 22 - column 2, line 54.* In the background section, Roe sets forth problems with previous hydrophobic materials used in absorbent products. According to Roe, among other problems, these materials result in slow transfer of urine to underlying absorbent cores. *Column 2, lines 39-45.* This problem is remedied by the hydrophilic topsheet and lotion combination of Roe. Roe is not concerned with leakage issues. The background and other teachings of Roe specifically guide one of skill in the art away from the treatment of a sealing edge as claimed.

In view of the complete lack of disclosure in Roe of an absorbent article with a sealing medium as claimed and the teachings of Roe away from the use of a sealing medium as claimed, Applicants respectfully request that this obviousness rejection be withdrawn.

Claims 20-21 were rejected under 35 U.S.C. §103(a) as being unpatentable over Roe in further view of Sivilich (U.S. Patent Number 5,669,902). Applicants respectfully traverse this rejection.

Claim 20 is directed to an absorbent article that includes longitudinally extending side extremities, an absorbent body disposed between a liquid-impermeable bottom sheet, which is intended to lie distal from a wearer in use, and a liquid-permeable upper sheet, which is intended to lie proximal to a wearer, and above the upper sheet, an essentially liquid-impermeable top sheet which is intended to lie against a wearer, and which includes elastic for shaping the article to a wearer's body, and includes apertures intended to lie in register with an anus and a urethra orifice of a wearer, around which apertures elastically puckered sealing edges are disposed in the top sheet; wherein at least said sealing edges are treated with a non-adhesive sealing medium which, in use, at least partly fills out any through-penetrating pores which may be formed between said sealing edges and an abutment part of a wearer's skin, and/or which, when the article is donned, smears said abutment skin part and thereby increases a liquid-skin wetting angle.

According to the Office Action, the difference between Roe¹ and claim 20 is the provision that the absorbent article include an essentially liquid-impermeable top sheet which is intended to lie against a wearer and which includes elastic for shaping the article to the wearer's body, and includes apertures intended to lie in register with an anus and a urethra orifice of a wearer, around which apertures elastically puckered sealing edges are disposed in the top sheet. This difference is allegedly remedied by the addition of Sivilich.

First, as noted above, Roe teaches the use of hydrophilic materials to promote transfer of liquids in absorbent articles and does not teach or suggest an absorbent article as claimed which is directed to treating the sealing edges with a sealing medium. Second, the addition of Sivilich does not remedy the deficiencies of Roe.

Sivilich is directed to an incontinence garment in the form of boxer shorts. The structure includes a relatively loose fitting external portion in the form of boxer shorts with a tight fitting internal shell which supports an absorbent pad in a manner which retains the pad in intimate contact with the body. Moreover, the structure permits different size pads to be placed in different positions so as to be useful for both urinary and fecal incontinence.

Column 1, line 63 - column 2, line 2. The Office Action refers to Figure 4 for a showing of an aperture intended to lie in register with an anus and a urethra orifice of a wearer, around which apertures elastically puckered sealing edges are disposed in the topsheet. Applicants do not interpret this figure to show such aspects. Rather, the figures show waistband 10 with a front portion 16 and a rear portion 18. Shell 20 is formed of a fabric material, preferably with some elasticity. The shell has a narrow crotch part 22 and relatively wider seat part 24. An absorbent pad 26 is situated in the shell. A liquid impermeable pouch 28 is provided to retain the pad which is defined by a wall 30 with edges which overlap at the front and the rear to form an oval opening 32 on the top surface. The bottom surface 34 is closed. The edges 36 can be finished with an elastic material to facilitate insertion and removal of the pad.

Column 3, lines 4-24. None of these features appears to include apertures intended to lie in

¹Applicants note the Office Action actually refers to Schulte but believe the patent intended was Roe, U.S. Patent No. 5,607,760.

register with an anus and a urethra orifice of a wearer and around which apertures elastically puckered sealing edges are disposed in the top sheet. Since Sivilich does not disclose the elements of the invention of claim 20 missing from Roe, Applicants respectfully request that the obviousness rejection over Roe and Sivilich be withdrawn.

Applicants believe they have responded to all matters raised in the above referenced Office Action and that the application is now in condition for allowance. If the Examiner has any questions concerning this Application or this Reply and Amendment, the Examiner is invited to contact the undersigned.

Respectfully submitted,

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